

CHAPTER 6

THE DESIGN DOCUMENTS

6-1. Introduction.

The conceptual (10%) design translates a selected adjacency diagram to the project site and communicates key design concepts to the play area committee. During conceptual design, design elements are selected for each play area component. Conceptual design provides opportunities to evaluate alternative design approaches and identify preliminary costs. Once the design is approved by the civil or installation engineer and the play area committee, final design documents will be created. If required, a phased development plan can also be created.

6-2. Site Adapt the Adjacency Diagram.

The designer will select an adjacency diagram from chapter 5 based on the age group served by the play area and the findings of the design criteria report. The selected diagram will be adapted to the site by comparing the information documented during site analysis to the selected adjacency diagram. Using the selected diagram, a site-adapted adjacency diagram will be created for play area components using simple bubble-type shapes. The bubbles should be drawn to the approximate scaled size requirements. These bubble-type shapes should be organized on the site plan in the locations suggested by the site analysis and the selected diagram. The important relationships between play area components should be maintained. The desired connections or separations between play activities should be indicated graphically. Locations where support facilities, screens, barriers, or enclosures may be needed should be indicated. Site constraints which need to be modified to permit use, such as regrading of steep slopes, should also be noted. The site-adapted adjacency diagram will be used to create the conceptual (10%) design.

a. Relatively Flat Sites. Often the site is flat, with few physical characteristics to limit or direct play area organization. For these sites, the site analysis may provide only limited direction. The optimum relationships presented in the adjacency diagrams may then be applied to the site with little or no adjustment needed to accommodate physical site characteristics.

b. Sites With Varied Topography. If extensive grading is necessary to accommodate a design, it may be prohibitively expensive to implement the adjacency diagrams as shown. When this occurs, the designer should reorganize the adjacency dia-

gram to utilize existing landforms following the general guidelines presented in chapter 5.

c. Existing Vegetation. Mature trees, shrubs, and other desirable vegetation should be maintained whenever possible. If needed, the adjacency diagrams should be reorganized to utilize existing vegetation following the general guidelines presented in chapter 5.

d. Combining Adjacency Diagrams. When combining more than one adjacency diagram to create a play area serving multiple age groups, the play area relationships described in chapter 5 should be maintained. Low walls or other barriers should provide definition, separation, and safety between play area components as previously described.

e. Alternative Site Adapted Adjacency Diagrams. If desired, several alternative adjacency diagrams may be prepared. These may then be evaluated to determine the arrangement which most completely satisfies the program requirements, site opportunities, and site constraints.

6-3. Create a Conceptual Design and Cost Estimate.

The conceptual design is drawn to scale and shows exact sizes and locations of play area components (fig 6-1). While complete construction details are not normally included, sufficiently detailed drawings should be provided to clearly depict the design concept and to assist in cost estimating. The designer should ensure that the site layout meets the requirements of this manual and the design criteria report.

a. Conceptual Design. The conceptual design should include the following:

(1) *Play Area Components.* Play area components and major activity points, such as entrances and exits, sitting areas, and service vehicle access, should be indicated. The location of proposed support facilities, such as drinking fountains, drainage, and primary utility points of connection, should be shown.

(2) *Design Elements.* The design elements that comprise each play area component should be identified. These elements will be located on the conceptual design.

(3) *Use Zones.* Manufactured play equipment requires use zones covered with safety surfacing in accordance with chapter 11. All use zones will be shown.

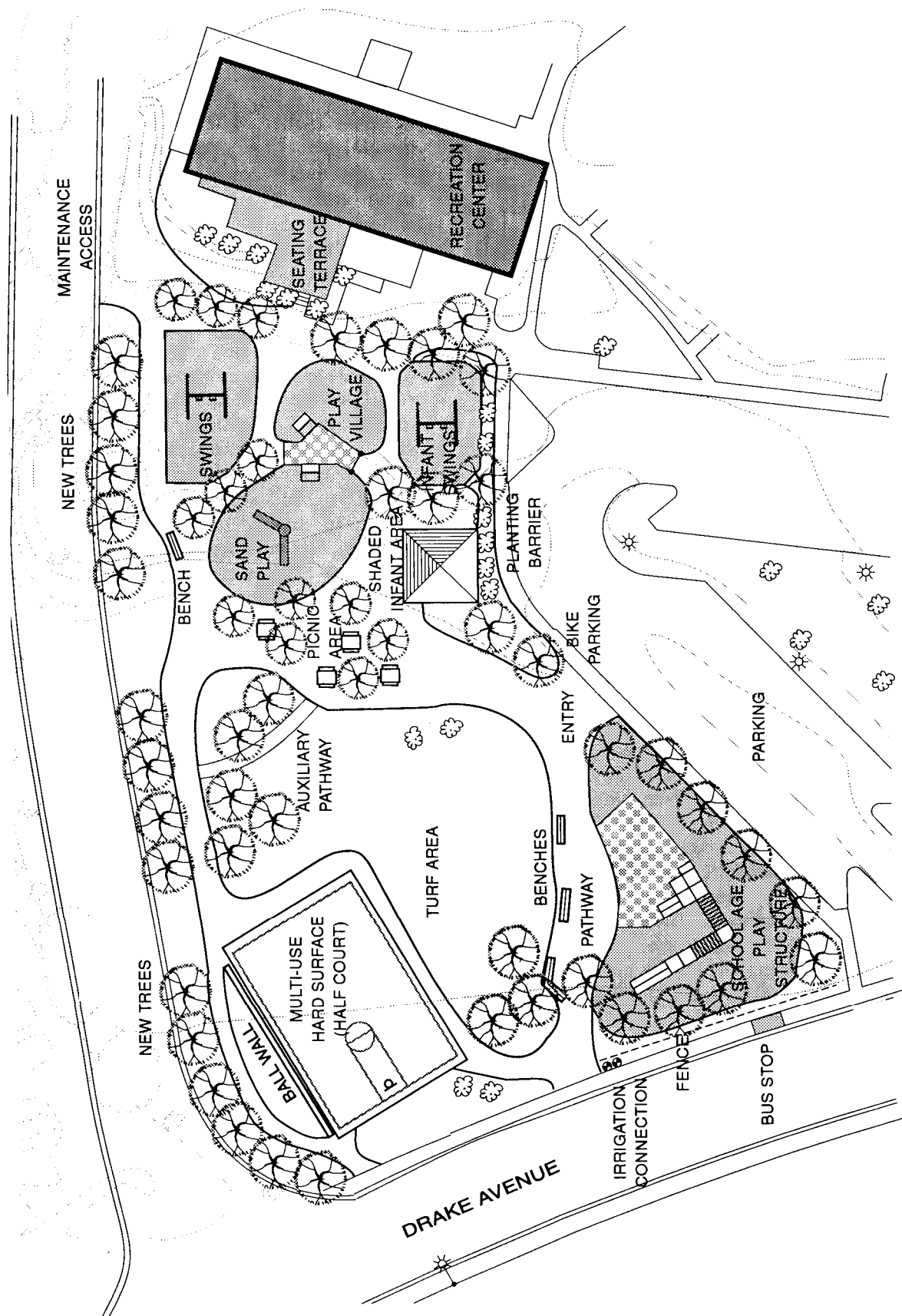


Figure 6-1 Conceptual Design

(4) *Ground Surface Materials.* Ground surface materials, such as turf, sand, and concrete, should be identified. Safety surfacing will be clearly labeled to distinguish it from other surface materials.

(5) *Plant Materials.* Locations for existing plant materials which will be retained and proposed plant materials should be shown. The intended functional use of these materials should be described. Poisonous plants should be identified for removal.

(6) *Existing Site Features.* Existing structures and other site features which are to be removed or retained should be noted. Any improvements needed for child safety should be described. If extensive demolition or regrading is required, a separate drawing should be added to address this work.

(7) *Topography.* Existing and proposed topography should be indicated. Spot elevations should be indicated at critical points such as paths, structures, existing trees, entrances to buildings, and major changes in grade.

(8) *Accessibility.* Accessibility for children and adults with disabilities will be provided in accordance to this manual.

b. Cost Estimates. Preliminary cost estimates for the conceptual design should be developed. Quantity takeoffs and, if necessary, product manufacturer quotations for important design elements should be included.

c. Alternative Design Concepts. Alternate ideas for specific play area components may be presented if desired.

d. Specifications. Outline specifications should be prepared.

e. Product Cut Sheets. If needed to illustrate the design concept, catalogue cut sheets depicting the primary products proposed may be included.

6-4. Coordinate with the Play Area Committee.

The play area committee and the engineering staff should review the conceptual design. This de-

sign review meeting may be open to interested community members for public comment. After the review, the designer will make recommended design changes or refinements.

6-5. Develop the Final Design Documents.

The designer will convert the conceptual design into final design documents in accordance with local policy and regulations.

6-6. Create a Phased Development Plan.

Ideally, funding will be available when the play area design begins. However, sometimes funding of play areas becomes available in small increments. If not properly planned, incremental development of play areas can create safety problems and inappropriate play area relationships. Preparation of the overall conceptual plan allows the project to be developed in orderly phases while maintaining child safety and functional requirements. Therefore, when initial funding is limited, the designer will work with the play area committee to prioritize the play area elements for phased development. The phased development plan for each design is unique. Depending on available funds, the first phase of development could include pathways, utilities, grading, and the most important play area components.

6-7. Coordinate with the Play Area Committee.

The engineering staff and play area committee will review the final design submittals at designated intervals during the design process. In addition, the installation safety manager will review the documents for compliance with child safety requirements. The number of reviews will vary depending on the size of the project.